

ESTIMATE 11/11/18
Set-up = 1h00 production/part = 0h20

[Dart Hawkesbury] Job Sheet - David, Logan



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C45-3-3

Job Sheet 183001



Part No: C45-3-3

Job Qty: 20 ea

Part Name: Latch Roller



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/10/18

Job Tracking No:

Due Date: 9/10/18

Created By: Logan David

Type: SOLD

Description:

Note: DWG C45-3-3 REV 4A IPP REV A 18.02.13 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	20 Ea	9/10/18	9/10/18	0.00	0.00	Start Up Machining-4		18/09/12
120	Mori Seiki	20 pcs	9/10/18	9/10/18	1.00	3.33	MORI SL-154		18/09/12
130	QC	20 pcs	9/10/18	9/10/18	0.00	0.00	QC2 Machining-5		18/09/12
140	QC	20 pcs	9/10/18	9/10/18	0.00	0.00	QC8 Machining-5		18/09/12
150	Outsource	20 pcs	9/10/18	9/10/18	0.00	0.00	Outsource1		18/09/12
160	Packaging	20 pcs	9/10/18	9/10/18	0.00	0.00	Packaging2		SEP 19 2018
170	QC	20 pcs	9/10/18	9/10/18	0.00	0.00	QC6		
171	Mori Seiki	20 pcs	9/10/18	9/10/18	0.00	2.00	MORI SL-154		
172	QC	20 pcs	9/10/18	9/10/18	0.00	0.00	QC2 Machining-5		
173	QC	20 pcs	9/10/18	9/10/18	0.00	0.00	QC8 Machining-5		
180	Outsource	20 pcs	9/10/18	9/10/18	0.00	0.00	Outsource15		SEP 19 2018
190	Packaging	20 pcs	9/10/18	9/10/18	0.00	0.00	Packaging2		38
200	QC	20 pcs	9/10/18	9/10/18	0.00	0.00	QC6		38
210	Packaging	20 pcs	9/10/18	9/10/18	0.00	0.00	Packaging3-2		38
220	QC21-FG	20 Ea	9/10/18	9/10/18	0.00	0.00	QC21		38

Part Op 120 - 1-Machine as per folio FC 345 OP-2 FOLIO REV: _____ DWG REV: _____ 2-Debur
 Descriptions: 150 - 1-Issue P/O to Metcore; P/O 040124 RC 53-56 2-Bead blast 3- Certificate of Conformity is required
 NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or ATG
 160 - Receive
 171 - 1-Machine as per folio FC 345 OP-2 FOLIO REV: _____ DWG REV: _____ 2-Debur
 180 - 1-Issue P/O to Groupe Altech: P/O 041042 -Nickel plate, QQ-N-290, Class 2, Grade E or F ****verify plating thickness, grade could change**** -Nickel Plate .0004- .0006 - Certificate of Conformity is required
 190 - Receive
 210 - Identify and stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M4140H-R1.000	4140 round bar 1.00	.8200 ft (.041 ea)	90-Start up Operation	5070822

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M4140H-R1.000	1	15	0



Dart Aerospace Ltd.
1270 Aberdeen Street
Hewesbury, ON K6A 1K7
CANADA
TEL: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S109414



Part: C45-3-3

Job No: 183001

Serial No/Batch: S109414

Revision: 4A

Inspector:

Exp Date:

Instructions:

Date: 09/19/18

Part Specifications

Specifications could not be found.

Plex 9/10/18 12:51 PM dart.logan.david

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

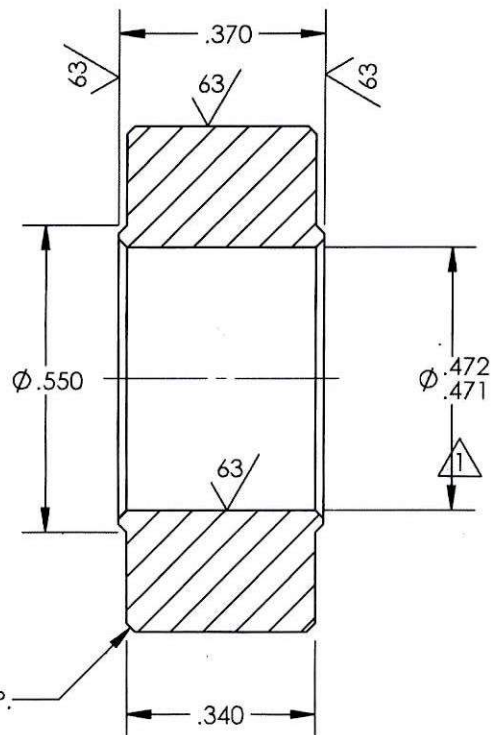
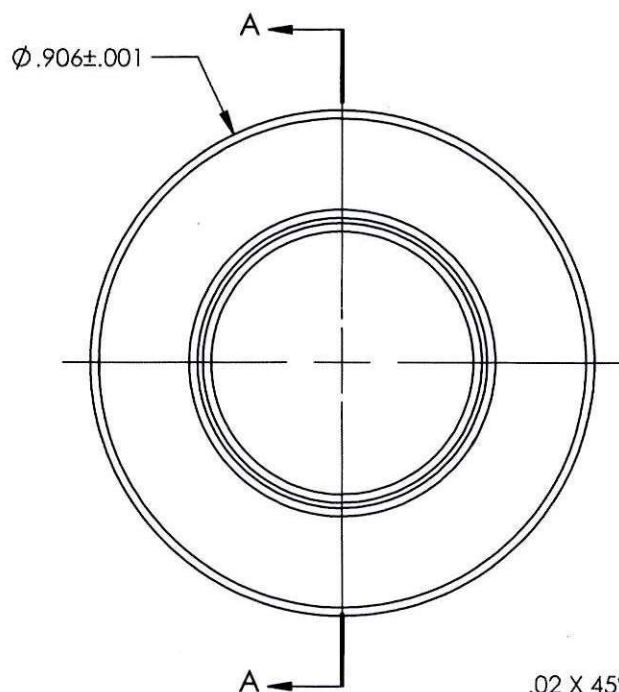
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

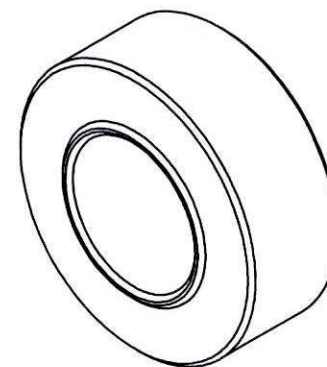
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Dimension Before
Treatment → .905"

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4		AS DRAWN BY CANAM.	9/11/2012	RJC	
4A	14-0127	CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED BAG & LABEL NOTE. CH'D TOLERANCE ON NON-CRITICAL DIMENSIONS.	8/13/2014	DPD	RW



SECTION A-A



NOTES:

1. DU BEARING TO BE INSTALLED AFTER PLATING.
2. BAG & LABEL WITH BATCH NUMBER.

DART AEROSPACE	
TITLE LATCH ROLLER	
DWG NO. C45-3-3	REV 4A
MAT'L 4140/4142	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D West</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 53-56
.XX ± .01 ANGLES ± 5°	FINISH NICKEL PLATE
.X ± .1	SPEC .0004 - .0006 THICK
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 3:1	DATE 8/22/1997
SHEET 1 OF 1	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			C45-3-3	1	LATCH ROLLER	4140/4142	

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. _____	Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
NCR No. _____	Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐
	Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
	Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval
--------	---------	-----------------	-----------------------

Description Work Order Deviation	Disposition	
		Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

DART
AEROSPACE

Container No: **\$109414**

Part: **C45-3-3**

Part No: **183001**

Serial No/Batch: **\$109414**

Revision: **4A**

Inspector: _____

Print Date: _____

Instructions: _____

Date: 09/12/18

AULT CATEGORY

☐	Power Loss/Surge	☐	Positioned Wrong
☐	Folio/Program	☐	Outside Dimensions
☐	Grain	☐	Over/Under tolerance
☐	Weld	☐	Part Incorrect
☐	Wrong Stock Pulled	☐	Part Lost/Missing
☐	Out of Sequence	☐	Part Moved
☐	Off-set	☐	Drawing
☐	Mislabeled	☐	Finish
☐	Fit/Function	☐	Misread
☐	Misaligned/off center	☐	Turning Sequence



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040996**

Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S R14 Canada
Phone: 866 257 6395

PO No: PO040996
PO Date: 9/12/18
Due Date: 9/21/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula
Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	183001	C45-3-3	Latch Roller 1-Issue P/O to Atlantic Heat Treat; P/O RC 53-56 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Atlantic to ship directly to Groupe Altech	Firmed	-	9/21/18	30 pcs	0 pcs	30 pcs	\$2.50/pcs	\$75.00
Line Item Note *** Major rush *** 2 181107 RB T101512 Wrench 1-Issue P/O to Atlantic; P/O RC 40-45 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Atlantic to ship directly to Groupe Altech***											
2	181107	RB T101512	Wrench 1-Issue P/O to Atlantic; P/O RC 40-45 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Atlantic to ship directly to Groupe Altech***	Firmed	-	9/21/18	3 pcs	0 pcs	3 pcs	\$25.00/pcs	\$75.00
Grand Total:											\$150.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 9/17/18 12:44 PM dart.tsimiklis.chrisoula

Atlantic Heat Treating (2001) Ltd

Order No.: 158475

Ship Date: 14/9/2018

Shipping Ticket

Sold To: 1448**DART AEROSPACE LTD.**
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Page 1 of 1

Ship To: 155624**DART AEROSPACE LTD.**
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Purchase Order Number	Packing List No	Customer Job No	Route	Carrier
PO040996				

Quantity	Part No. / Part Name / Part Description	Pounds
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3PCS MATERIAL 4140
HEAT TREAT AND SAND BLAST TO 40-45RC
C OF C, PRT# RB T101512, JOB# 181107

Container Type	# Of Containers	Cust Cont Id	Container Type	# Of Containers	Cust Cont Id
BOX	1				

NOTICE: OUR LIABILITY IS LIMITED TO OUR INVOICE CHARGES ONLY

Shipped Complete**Quantity Shipped:** 3**Pounds Shipped:** 3.00**Order No.: 158475****Shipped Complete****Quantity Shipped:** 3.00**Received By:****Date:****Pounds Shipped:** 3.00**Sold To: DART AEROSPACE LTD.****Shipped ON: 09/14/2018**

Certification

Date: 09/17/2018

Entry Date: 09/14/2018

Page: 1 of 1

To:DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: PO040996 ✓

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 4140

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
3	3PCS MATERIAL 4140 HEAT TREAT AND SAND BLAST TO 40-45RC C OF C, PRT# RB T101512, JOB# 181107 ✓	3

Insp. Type	Scale	Minimum	Maximum	Number	Other
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Customer Requirements:

Harden rockwell

Results:

Harden ROCKWE	40.	45.	40.	TESTED AS PER SAMPLING PLAN
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HEAT TREATED TO 40 RC AS PER CUSTOMER REQUEST

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY). ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER, IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in treating or straightening, except by prior written agreement, as above, nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.


KEAN SHEPHERD
QUALITY CONTROL
ATLANTIC HEAT TREATING 2001 LTD

DA
38
9-86



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041042**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041042
PO Date: 9/17/18
Due Date: 9/28/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula
Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	183001	C45-3-3	-Issue P/O to Groupe Altech: P/O -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 - Certificate of Conformity is required	Firmed	-	9/28/18	30 pcs	0 pcs	30 pcs	\$4.00/pcs	\$120.00

30 X SEP 21 2018

DAE
38
9-89

Line Item Note ** rush **

Grand Total: \$120.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 9/19/18 11:46 AM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(012798-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

012798 - 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
21-Sep-2018		Aman		041042 ✓				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C45-3-3 ✓ Rev.	C45-3-3 01-E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 THICK	E-NICKEL STEEL CH	30	30 ✓	0	0	0 38 9-89

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.